REMARKS

The Applicants respectfully maintain that they have amended the specification and claims to overcome all of the objections and rejections asserted by the Examiner in the Office Action mailed August 28, 2002. Reconsideration and Rexamination is respectfully requested.

CLAIM OBJECTIONS

The Applicant has amended claims 21 and 31 to overcome inadvertent objections by changing the claim dependency to properly recited the claimed invention. Withdrawal of the objections is respectfully requested.

35 U.S.C. 102 REJECTIONS

In the Office Action at paragraph 5, the Examiner asserts an rejection under 35 U.S.C. 102(a), rejecting claims 1-3, 5-6, and 18-19, asserting that they are anticipated by Guinther et al. (US 6,016,466). Guinther teaches a software performance profiling system. This type of system is similar to the prior art profiling systems expressly described within the background section of the application at pages 1-3. The independent claims 1, 13 and 18 were amended in the prior response to an office action to clarify the differences noted in the application between prior profiling systems in which instrumentation code is inserted for testing and the claimed invention that permanently inserts performance markers into the final product so that the performance testing is performed on a version of an application that is identical to the version that is ultimately considered the delivered product. Guinther teaches the process of instrumenting portions of software that is of interest where testing is to occur. The teachings expressly make a distinction between "instrumented" code and "uninstrumented" code. See Col. 15, lines 21-36 as one example.

In contrast, the claimed invention utilizes performance markers that are permanently inserted into application programs that are used in testing, benchmarking and profiling the operation of the software. These performance markers are intended to be in the final version of the software that is ultimately delivered to end users. The Guinther distinction between uninstumented and

instrumented code is consisted with all prior art systems where the instrumentation code is added for the purposes of testing and made to impose little or no impact upon the performance measures created by the instrumentation code. However, the application program is in fact modified to insert the instrumentation code in place of uninstrumented code. In contrast, the claimed invention, as amended, requires the permanent insertion of performance markers into the application programs that impose little if any overhead to operate, and thus are not removed from the application program when the application has completed its testing. As such, Guinther does not anticipate the claimed invention, as amended, that is recited within independent claims 1, 13, and 18.

In response to this argument, the Examiner asserts the following on Page 15 of the recent office action:

> Applicant argues that Guinther does not teach permanently adding a performance marker to the code to obtain timestamp data. However, it is the Examiner's position that Guinther does teach this limitation. Guinther teaches inserting monitoring instructions into the code to collect timestamp data (See Guinther, column 22, lines, 24-41). Guinther also teaches that this code may be entered in a variety of conventional ways, including "manually inserting the data" (see Guinther at column 22, lines 32-35). Manually inserting the monitoring data into the application code suggests that this code modification is permanent. Further, Guinther does not suggest removing the code after testing data has been gathered.
> (See Office action at page 15 – EMPHASIS ADDED).

The Applicants respectfully maintain that the Examiner's assertion that manually inserting instructions would automatically render the addition permanent is not consistent with the teachings of Guinther. The full passage cited by the Examiner states:

> Referring to FIG. 16, a block of code 480 includes a start monitoring instruction 482 and an end monitoring instruction 484. The instructions 482, 484 may be added to the block of code 480 in a variety of conventional manners. In a preferred embodiment, the instructions 482, 484 are added using the IR instrumentation mechanism discussed above in connection with FIGS. 1-11(c). In that case, monitoring instructions may be inserted at the beginning and end of functions and for each line of source code. Alternatively, monitoring instructions may be manually

> inserted into the code or may be inserted automatically using other types of conventional instrumentation programs.
> See Guinther, col. 22, lines 24-35 (EMPHASIS ADDED).

In all of these possible methods, the above distinction for using instrumented code for use in profiling is maintained. As discussed above, prior profiling and instrumentation systems added instrumentation modules at compile time to collect the data. Guinther is consistent with this approach as quoted above. In addition, Fig. 2, Fig 3 , Fig. 4, and Fig. 12 illustrate that code instrumentation is separate from the compiler and the object code. The txt describing these figures provides no support to a suggestion that any instrumentation code is to be permanently added to the runtime program. From all of the teachings and suggestions from Guinther, the suggestion that the instrumentation instructions would be permanently inserted into the code being tested is a leap that is not supported, except in light of the disclosure in the present invention. This approach, however, is impermissible hindsight that may not be followed by the Examiner.

In addition, claim 1, recites the express use of an init module , a performance marker module for obtaining and storing the timestamp data, and an uninit module to perform the processing associated with the collection of the timestamp data. The Applicants respectfully maintain that Guinther fails to teach or suggest the use of these modules. The Examiner points to Guinther at col. 18, line 64 through col. 19, line 2 for an example of an init module. The Applicants do not see an init module described in this passage. The Applicants respectfully suggest that Guinther does not use the three module configuration recited within the claims. Without a teaching of each and every limitation in the claims, a claimed invention cannot be anticipated by a prior art reference. For at least the above reasons, independent claims 1, 13 and 18 are patentable over Guinther.

Dependent claims 2-3, 5-6 and 19 recite additional limitations that further distinguish the claime invention from the teaching found in Guinther and are also allowable for at least the same reasons recited above.

35 U.S.C. 103 REJECTIONS

In the Office Action at paragraph 6, the Examiner asserts an rejection under 35 U.S.C. 103, rejecting claims 7-12 and 23-26, asserting that they are unpatentable over Guinther et al. (US 6,016,466) in light of Levine et al. (US 6,349,406). The Examiner cites Levine for a teaching of subtracting an estimate of an overhead associated with the use of instrumentation code to determine the performance measurements for the actual application program. The claims rejected under 35 U.S.C. 103 all depend from the independent claims discussed above. For the reasons stated above, these claims are patentable over Guinther for at least the reasons stated above. Levine does not remedy this deficiency in Guinther. In fact, Levine teaches away from the permanent insertion of performance markers into an application program. As noted in Col. 8, Levine teaches the use of a JAVA interpreter that is itself instrumented such that performance measures may be obtained. From this, Levine expressly notes that application program itself does not include such markers. Therefore, Levine may not be combined with any teaching for a system in which the use of permanent performance markers are included within an application program. These claims are now patentable over the prior art of record for at least these reasons.

DOUBLE PATENTING REJECTION

In the Office action, the Examiner asserts a provisional double patenting rejection for the claims in this application with the related application, Serial No. 09/606,896. This application is commonly assigned and the Applicants will submit a terminal disclaimer in this application upon receipt of an indication that the applications are otherwise allowable. If the Examiner wishes to request these prior to the entry of the next Office Action because the applications are deemed otherwise allowable, the Applicants respectfully request the Examiner contact the undersigned counsel and such terminal disclaimers will be provided to place both applications in condition for allowance.

CONCLUSION

For all of the above reasons, the Applicants respectfully maintain that the pending claims, as amended, are now patentable over the prior art of record. For these reasons, the Applicants respectfully request that the above objections and rejections be withdrawn and the application be passed for allowance. If the Examiner believes that this application is not now in condition for allowance, the Applicants respectfully request that an Interview with the Examiner be granted to assist in the furtherance of the prosecution of this matter prior to the issuance of another action on the merits in this matter.

Respectfully submitted,

MERCHANT & GOULD P.C.
P.O. Box 2903
Minneapolis, Minnesota 55402-0903
(612) 332-5300

Date: 10 Sept 2003

Richard J. Gregson
Reg. No. 41,804